

What is claimed is:

[Claim 1] 1. An emergency situation power management system applied to an automotive vehicle, comprising the combination of:

- at least two electrical power sources (1, 2),
- first detection means (3) for detecting at least the voltage of said electrical power sources (1, 2), which are at least two in number,
- second detection means (4) for detecting variations in a series of parameters indicative of at least one emergency situation to which said vehicle is subjected,
- an electronic system (5) associated to said first detection means (3) and second detection means (4) and to control means (6) applied to generate at least one action to perform when at least one of said emergency situations detected by said second detection means (4) occurs, said action being carried out by means of using one of said power sources (1, 2) capable of providing a voltage above a determined threshold, which is chosen by the electronic system (5) as a result of the information received from said first detection means (3).

[Claim 2] 2. A system according to claim 1, characterized in that it comprises only two electrical power sources (1, 2) of a different voltage.

[Claim 3] 3. A system according to claim 1, characterized in that said electrical power sources (1, 2) are batteries feeding different components or modules of said vehicle.

[Claim 4] 4. A system according to claim 2, characterized in that it comprises a boost, buck or buck–boost DC–DC converter (18) connecting the only two power sources (1, 2) of a different voltage and allows for the power flow between them.

[Claim 5] 5. A system according to claim 1, characterized in that at least one of said electrical power sources (1, 2) is a battery.

[Claim 6] 6. A system according to claim 1, characterized in that at least one of said electrical power sources (1, 2) is an ultracap.

[Claim 7] 7. A system according to claim 1, characterized in that said electrical power sources (1, 2) are arranged such that they are spaced out in different parts of said vehicle.

[Claim 8] 8. A system according to claim 1, characterized in that said action to perform, which is at least one, when at least one of said emergency situations occurs is one selected from the group comprising: unlocking the locks of the doors (7) of said vehicle, locally emitting acoustic and/or audible alarms (8), sending an alarm message or call (9) to a remote site, unbuckling the seat belts (10) of the vehicle, opening the windows (11) of the vehicle, actuating the airbags (12) of the vehicle and disconnecting a series of devices (13) susceptible to catching fire.

[Claim 9] 9. A system according to claim 8, characterized in that it comprises a radiofrequency transmitter for performing said sending of an alarm message or call (9) to a remote site.

[Claim 10] 10. A system according to claim 1, characterized in that said emergency situation, which is at least one, is one selected from the group comprising: a traffic accident (14), a failure in the electrical system (15) of the vehicle, a failure of the mechanical system (16) of the vehicle and the actuation of an emergency push button (17) included in the system.

[Claim 11] 11. A system according to claim 1, characterized in that it comprises at least a DC-DC boost converter, the input of which is connected to said electrical power sources (1, 2) and the output of which is connected to several devices responsible for carrying out the actions to be performed when an emergency situation is detected for the purpose of actuating them with a voltage from one of said electrical power sources (1, 2) lower than that needed for actuating said devices.

[Claim 12] 12. A system according to claim 1, characterized in that said second detection means (4) comprise at least an accelerometer and/or at least an inclinometer and/or at least a temperature sensor and/or at least a voltage sensor and/or at least an intensity sensor.

[Claim 13] 13. A system according to claim 1, characterized in that the electronic system comprises a memory having stored a list of priorities in terms of the actions to perform in response to said emergency situations.